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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,396	11/25/2003	George Chu	MSFT-2784/303655.1	1653

23377 7590 04/12/2007

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EXAMINER	
INGBERG, TODD D	
ART UNIT	**PAPER NUMBER**
2193	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/721,396	CHU ET AL.	
	Examiner	Art Unit	
	Todd Ingberg	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11/25/2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1 – 38 have been examined.

Information Disclosure Statement

1. The Information Disclosure Statement filed November 25, 2003 has been examined.

Specification

2. The use of the trademark in claim 14 has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks. Examiner's comment on Applicant's use of the trademarks in the claim. The use is mere use and does not endanger the understanding of the trademark (No adverse affect). To conform with the MPEP, the Examiner requests the capitalization of the trademarks.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 15 – 38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The current focus of the Patent Office in regard to statutory inventions under 35 U.S.C. § 101 for method claims and claims that recite a judicial exception (software) is that the claimed invention recite a practical application. Practical

application can be provided by a physical transformation or a tangible result. No physical transformation is recited and additionally, the final result of the claim is way to perform synchronization which is not a tangible because the result is not clearly and concisely claimed to be tangibly embodied on a computer readable medium. The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101.

<http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf>

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1 – 27 and 35 – 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN # 6,968,550 B2 Bransom et al filed January 18, 2002 in view of USPN # 5,991,771 Falls et al, issued November 1999.

Claim 1

Bransom teaches a deterministic method for bootstrapping software onto a remote computing device, comprising:

in response to determining that a connectivity component is missing from the remote computing device (Bransom, Figure 1, #932, col 23, lines 2 - 30), loading the connectivity component via an existing transport mechanism; (Bransom, lines 30 – 54)

using the connectivity component to bootstrap a remote procedure call component (Falls, col 4, lines 24-31), the remote procedure call component for receiving at least one argument via a remote procedure call (as per above), and executing a binary stored in a library on the remote computing device; and loading the library, the library comprising at least one callable binary (Falls, col 4, lines 40 - 64). Bransom teaches updating the control program but fails to explicitly teach mechanisms. It is Falls who explicitly teaches mechanisms for downloading. Therefore, it

would have benn obvios to one of ordinary skill at the time of invention to combine Bransom and Falls because synchronization keeps devices up to date.

Claim 2
The method of claim 1, further comprising determining the connectivity component to load by querying a data store of connectivity components. (Bransom, Figure 3 #200, #210 and #220, #230).

Claim 5
The method of claim 2, wherein the data store of connectivity components resides on a second computing device. (Bransom, Fig4, #350 - Retrieve)

Claim 3
The method of claim 1, wherein the connectivity component to be loaded onto the remote computing device is determined by a type of central processing unit of the remote computing device. (Bransom, Figure 3 #200, #210 and #220, #230).

Claim 4
The method of claim 1, wherein the connectivity component to be loaded is determined by a type of platform running on the remote computing device. (Bransom, Figure 3 #200, #210 and #220, #230).

Claim 6
The method of claim 1, wherein the remote procedure call component receives a result of executing the binary stored in the library on the remote computing device to a second computing device. (Bransom, Figure 3 #200, #210 and #220, #230).

Claim 7
The method of claim 1, wherein the remote computing device is a personal digital assistant. (Falls, col 6, 52 – 61)

Claim 8
The method of claim 1, wherein the remote computing device is a router. (Falls, col 6, 52 – 61, data transmission means)

Claim 13
The method of claim 8, wherein a process running the first version of the binary is terminated. (Bransom, figure 5, #5050)

Claim 9
The method of claim 1, wherein the remote computing device is a modem. (Falls, col 6, 52 – 61, data transmission means)

Claim 10

The method of claim 1 , wherein the remote computing device is an OEM board. (Falls, col 6, 52 – 61, mini etc computers)

Claim 11
The method of claim 1, wherein the remote computing device is a smart telephone. (Falls, col 6, 52 – 61)

Claim 12
The method of claim 1, wherein the binary to be executed in the library is a first version of the binary and a second version of the binary is loaded into the remote computing device library. (Bransom, figure 5, #5040)

Claim 14
The method of claim 1, wherein the existing transport mechanism is TCP, TCP/IP, KITL®, Emulator or ActiveSync®. (Falls, Figure 2, #52)

Claim 15
A deterministic method for bootstrapping software onto a remote computing device, comprising:
in response to determining that a connectivity component is present on the remote computing device, using the connectivity component to bootstrap a remote procedure call component, the remote procedure call component for receiving at least one argument via a remote procedure call, and executing a binary stored in a library on the remote computing device; and
loading the library using the connectivity component, the library comprising a plurality of callable binaries. See the rejection for claim 1

Claim 16
The method of claim 15, further comprising determining the connectivity component to load by querying a data store of connectivity components. See the rejection for claim 3

Claim 19
The method of claim 16, wherein the remote computing device is a first computing device and the data store of connectivity components to be loaded resides on a second computing device. See the rejection for claim 5

Claim 17
The method of claim 15, wherein the connectivity component to be loaded onto the remote computing device is determined by a type of central processing unit of the remote computing device. See the rejection for claim 3

Claim 18
The method of claim 15, wherein the connectivity component to be loaded is determined by a type of platform running on the remote computing device. See the rejection for claim 5

Claim 20

The method of claim 15, further comprising receiving a result of executing the binary.
See the rejection for claim 12

Claim 21
The method of claim 15, wherein the remote computing device is a personal digital assistant, a router, a modem, an OEM board or a smart telephone. See the rejection for claim 7 (PDA).

Claim 22
The method of claim 15, wherein the binary to be executed in the library is a first version of the binary and a second version of the binary is loaded into the remote computing device library.
See the rejection for claim 12

Claim 23
The method of claim 22, wherein a process running the first version of the binary is terminated.
See the rejection for claim 12 and 13

Claim 24
A method for using a connectivity remote procedure call component to enable a computer to execute a function on a remote computing device, the method comprising:
determining an endpoint of a remote procedure call component on the remote computing device, the remote procedure call component associated with a library, the library comprising a plurality of callable binaries; determining that a remote procedure call component is running on the remote computing device; identifying the function to execute and a library the function is stored in via a remote procedure call to the remote computing device.
See the rejection for claim 1

Claim 25
The method of claim 24, further comprising sending the identification of the function to execute and the library the function is stored in at the remote device; executing the function at the remote device; and receiving a result of executing the function.
See the rejection for claim 6

Claim 26
A method for using a connectivity remote procedure call component to enable a function on a remote computer to be executed via a remote procedure call from a computer, the method comprising: receiving an identification of the function to execute and a library the function is stored in at the remote device; executing the function at the remote device; and returning a result of executing the function to the computer.
See the rejection for claim 1

Claim 27
The method of claim 26, further comprising receiving the function to execute and a library the function is stored in via a remote procedure call.
See the rejection for claim 2

Claim 28
A system for implementing distributed software on a remote device comprising:
a connectivity remote call processor for executing a binary on a remote device, determining binaries to be pushed to the remote device and pushing binaries to the remote device; and a datastore for tracking properties of the remote device. See the rejection for claim 1

Claim 29
The system of claim 28, wherein the connectivity remote call processor sends information associated with the binary to execute and receives a result of executing the binary.
See the rejection for claim 5

Claim 30
The system of claim 28, further comprising a connectivity server for copying a remote procedure call surrogate onto the remote device.
See the rejection for claim 6

Claim 31
The system of claim 28, wherein the datastore tracks information associated with a CPU of the remote device. See the rejection for claim 5

Claim 32
The system of claim 28, wherein the data store tracks information associated with a platform of the remote device. See the rejection for claim 3

Claim 33
The system of claim 28, wherein the data store is indexed by an identifier that identifies the remote device and a surrogate and an endpoint for establishing a connection with the remote device. See the rejection for claim 1

Claim 34
The system of claim 28, further comprising a bootstrapper for copying at least one binary to the remote device. See the rejection for claim 1

Claim 35
A system for receiving and executing software on a remote device comprising: a connectivity surrogate for receiving information from a computer, executing an indicated binary in a library of binaries and returning a result of executing the function to the computer, the library of binaries; and a connectivity component adapted to being queried to determine if the connectivity surrogate is loaded and for determining an endpoint of the connectivity surrogate.
See the rejection for claim 1

Claim 36
The system of claim 35 wherein the remote device is a personal digital assistant.

See the rejection for claim 7

Claim 37
The system of claim 35, wherein the remote device is an OEM board.
See the rejection for claim 10

Claim 38
The system of claim 35, wherein the remote device is a smart telephone.
See the rejection for claim 11

Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd Ingberg whose telephone number is (571) 272-3723. The examiner can normally be reached on during the work week..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Todd Ingberg
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